

C. REMARKS

Claims 1-20 are all the claims pending in the application.

Claims 6-12 and 14-20 have been withdrawn from consideration as the result of restriction requirement.

Claims 1, 2, 3 and 5 have been amended to better define Applicant's claimed invention. Support for this amendment is found on at least page 17, lines 15-22 of the specification and figures 4A, 4B, 5A and 5B.

Applicant thanks the Examiner for agreeing that claims 1-3 are generic.

Applicant thanks the Examiner for approving the drawing changes filed on December 18, 2002. Formal drawings incorporating the approved changes are being submitted along with this amendment.

I. Prior Art Rejections Based on Kim (U.S. Patent No. 5,963,433)

The Examiner has rejected claims 1 and 13 under 35 U.S.C. § 102(e) as being anticipated by Kim. Applicant traverses these rejections because Kim fails to disclose all of the limitations of the claims as amended. Specifically, Kim fails to disclose at least the following limitations:

a first package electrode on a surface of said first resin being electrically connected to said chip electrode, ***said first package electrode comprising a mounting pad and a testing pad*** provided apart from said mounting pad and said testing pad being in contact with a testing probe to enable electrical measurement of said semiconductor chip;

The Examiner asserts that Kim teaches in Fig. 4 a first package electrode (lead frame 33) on a surface of the first resin (package body 37), wherein the lead frame 33 consists of a first electrode region (bottom lead 31) connected to a second electrode region (inner lead 32). However, the lead frame 33 is nothing more than a conventional bottom lead of a semiconductor

package (see column 3, lines 12-27). The claimed invention requires two regions (for example, mounting area 101 and a testing area 102) formed on the first sealing resin 7. The testing area (pad), which is provided separately from the mounting area (pad), enables electrical measurement of the semiconductor device without scratching the surface of the mounting area.

On the other hand, Kim does not teach or suggest how the semiconductor package is probed or contacted by testing equipment before the semiconductor package is mounted on the printed circuit board. Kim clearly fails to disclose a first package electrode that comprises a mounting pad and a testing pad, which is defined by the amended claim 1.

With respect to claim 13, it should be allowable based on its dependence from claim 1 for at least the same reasons.

2. Prior Art Rejections Based on Solberg (U.S. Patent No. 6,147,401)

The Examiner has rejected claims 1-5 and 13 under 35 U.S.C. § 102(e) as being anticipated by Solberg. Applicant traverses these rejections because Solberg fails to disclose all of the limitations of the claims as amended. Specifically, Solberg fails to disclose at least the following limitations:

a first package electrode on a surface of said first resin being electrically connected to said chip electrode, ***said first package electrode comprising a mounting pad and a testing pad*** provided apart from said mounting pad and said testing pad being in contact with a testing probe to enable electrical measurement of said semiconductor chip;

The Examiner asserts that Solberg teaches in Fig. 3-4 a first electrode region A connected to the chip electrode 54 (contact) via an inner conductive wiring portion B and a second electrode region C connected to the first electrode region A. The Examiner also asserts that

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Solberg teaches a mounted object 64 (microelectronic element) connected to the first electrode region A via conductive wiring portion D. Finally, the Examiner asserts that Solberg further discloses a second resin 76 (curable liquid encapsulant); the first electrode region A being arranged along an edge of the first resin package, and the second electrode region C being arranged at an inner position with respect to the first electrode region A.

However, Solberg does not teach or suggest "a mounting pad" or "a testing pad." Solberg merely teaches in Fig. 2B a flexible substrate 22 including a plurality of conductive traces 38 (see column 7 lines 11-15). The Examiner equates each portion of the conductive trace with the first electrode region A and the second electrode region C. However, none of conductive traces 38 has the mounting pad and the testing pad. Thus, Solberg clearly fails to disclose a first package electrode that comprises a mounting pad and a testing pad, which is defined by the amended claim 1.

With respect to claims 2-5 and 13, they should be allowable based on their dependence from claim 1 for at least the same reasons.

3. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

A handwritten signature in cursive script, appearing to read 'Carl J. Pellegrini', written in black ink.

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